SOUTH ATLANTIC DIVISION

STATUS REPORT ON CIVIL WORKS ACTIVITIES

FISCAL YEAR 2004

BRIGADIER GENERAL PETER T. MADSEN DIVISION ENGINEER

BEFORE THE

SUBCOMMITTEE ON ENERGY AND WATER DEVELOPMENT APPROPRIATIONS

OF THE

COMMITTEE ON APPROPRIATIONS HOUSE OF REPRESENTATIVES

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STATUS REPORT ON THE CIVIL WORKS ACTIVITIES IN THE SOUTH ATLANTIC DIVISION FISCAL YEAR 2004

INTRODUCTION

Mr. Chairman, and distinguished members of the Committee, I am pleased to present the status report on the Civil Works activities of the South Atlantic Division of the U.S. Army Corps of Engineers.

DIVISION AREA

The South Atlantic Division is responsible for Civil Works activities in all or part of seven southeastern states, Puerto Rico, and the U.S. Virgin Islands. This area covers about 260,000 square miles and includes about 13 percent of the national population. Implementation of the Civil Works program is conducted through District offices located in Mobile, Alabama; Jacksonville, Florida; Savannah, Georgia; Wilmington, North Carolina; and Charleston, South Carolina. Management and oversight of the program are provided by the South Atlantic Division Headquarters located in Atlanta, Georgia.

OVERALL BUDGET

The President's Fiscal Year 2004 Budget request includes \$565,893,000 for Civil Works activities in the South Atlantic Division. This amount will allow for effective study and project execution and continued operation and maintenance.

GENERAL INVESTIGATIONS

The General Investigations Program allows for the planning, evaluation and initial design of solutions to water resource problems throughout the region.

FISCAL YEAR 2003

During Fiscal Year 2003, some important activities will be accomplished with funds previously provided. These activities include navigation studies to evaluate training works and other alternatives to increase the availability of the 9-foot navigation channel on the Alabama River Below Claiborne Lock and Dam, evaluate a more direct route between Bayou La Batre and the

Gulf of Mexico, and assist the City of Mobile in the development of a comprehensive management plan for Dog River in Alabama;

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studies to identify and resolve flood damage and environmental problems for the Baldwin County Watersheds in Alabama; identify potential alternatives to alleviate severe shoreline erosion problems for the Baldwin County Shoreline Protection, Alabama project; develop a comprehensive plan for the development, conservation, disposal, and utilization of water and related land resources, for flood damage reduction and allied purposes in Tuscaloosa County, Alabama; and complete the feasibility study for flood damage protection for Peachtree and Nancy Creeks Basins around the Metropolitan Atlanta, Georgia area; design of navigation projects to deepen and widen the channels at Port Everglades Harbor, channel widening and deepening in St. Petersburg Harbor in Florida; repair and construct a fish lift at the New Savannah Bluff Lock and Dam, Georgia project prior to transfer to locals; oversee the General Reevaluation Report activities and development of the Tier II EIS documents for the Savannah Harbor Expansion project in Georgia and South Carolina; shoreline protection facilities for Pawleys Island, South Carolina; and flood damage protection levees for Rio Nigua at Salinas in Puerto Rico. The local sponsor for the Charleston Harbor, South Carolina project has withdrawn local support for further study at this time. Congress provided funds to initiate study efforts for flood damage protection projects at Daytona Beach Shores in Volusia County, Flagler County, St. Johns County Beaches, St. Lucie County Beaches, and Walton County in Florida; Rio Yaquez in Mayaquez, Puerto Rico; Deep and Camp Creeks in Georgia; comprehensive study for Biscayne Bay, Florida; the Catawba River Watershed, North Carolina; and environmental studies for the Savannah Harbor Estuary in Georgia and downstream area for Philpott Lake, Virginia. Congress provided preconstruction engineering and design funds for Lido Key, Florida and Manteo, Shallowbag, Bay, North Carolina.

FISCAL YEAR 2004

The Fiscal Year 2004 General Investigations request of \$5,500,000 will allow for new and continuing study activities. No funds are provided to perform pre-construction engineering and design activities in the South Atlantic Division area.

SURVEYS

NEW

Funds are included in the President's Budget request for Fiscal Year 2004 to initiate two new study activities in the

South Atlantic Division to evaluate water resource problems and develop solutions.

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Tar River Basin, North Carolina

The Tar River Basin consists of all or portions of 12 counties in the eastern part of North Carolina. The basin is primarily an agricultural region with many small towns and several cities that are important commercial centers. The basin has suffered many severe floods with the worst resulting from Hurricane Floyd in 1999 with damages exceeding \$350,000,000. The initial study will determine the Federal interest in addressing flood control, environmental habitat, and other water resources issues in the basin. The requested funds will be used to prepare the reconnaissance report at full Federal expense.

Gulfport and Harrison County, Mississippi

Flat Branch, Brickyard Bayou, and Turkey Creek are located in Gulfport and suburban Harrison County on the coast of Mississippi. Flooding is occurring with ever increasing frequency and greater magnitude as the area rapidly develops and grows. Additionally there is increased stream bank erosion, degraded water quality, and destruction of wetlands and riparian buffers in the area. The study will evaluate the Federal interest in developing a comprehensive watershed plan for Gulfport and Harrison County. The funds requested for Fiscal Year 2004 will be used to prepare the reconnaissance report at full Federal expense.

CONTINUING

Navigation studies will continue to evaluate the need to deepen and widen the navigation channel at Lake Worth Inlet in Florida. Flood damage protection studies will continue to identify solutions to flood damage to homes in Brewton and East Brewton in Alabama; flood control and environmental protection measures in the Hillsborough River Basin, and comprehensive planning for flood control measures in the Withlacoochee River Basin in Florida; resolve problems in the City of Augusta, Richmond County, Georgia; determine improvements for flood damage reduction, shoreline erosion, beach nourishment and environmental restoration for Hancock County, Mississippi; identify water quality and environmental improvements for the Neuse River in North Carolina; determine water quality and fish and wildlife habitat improvements on the Waccamaw River in South Carolina; and improve the hydrologic regime basin around the John H. Kerr Dam and Reservoir in Virginia and North Carolina. Shoreline

protection studies will continue to evaluate the severe erosion problems to reduce shoreline erosion and storm induced damages

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along Boque Banks, conduct engineering studies of shoreline changes in the Hatteras and Ocracoke portion of Dare County to include the North Carolina Highway 12 transportation system, and address the shore erosion issues and explore shore protection alternatives at Surf City and North Topsail Beach in North Special studies are continuing on engineering, Carolina. economic, and environmental investigations to address flooding associated with storm water runoff and flood damage reduction needs in the Cahaba River Watershed, identify potential alternatives that would alleviate flood damages along Village Creek in the Birmingham Watershed in Alabama; determine the erosion effects of the Etowah River and Little River along the shoreline in the Allatoona Lake Watershed, determine if the earthen dam and a firing range within the Stevenson Creek watershed are potentially contributing to the degradation of the ecosystem in the Arabia Mountain preserve, analyze water resource issues along Indian, Sugar, Intrenchment and Federal Creeks, Long Island, Marsh and Johns Creeks, and Utoy, Sandy and Proctor Creeks, evaluate the high salinity levels, low dissolved oxygen, the nature of the tidal estuary, and the complicated hydraulic processes in the Savannah Harbor Ecosystem in Georgia; address increased salinity, water quality issues, explore environmental protection and restoration alternatives in Currituck Sound, North Carolina; and evaluate flood damage reduction, stream bank stabilization, and aquatic ecosystem restoration on Reedy Creek, and determine the need for wetland restoration and protection in the Santee River Delta in South Carolina. Comprehensive studies will continue to review operation of the major reservoirs in the Savannah River Basin in Georgia and South Carolina; and identify extensive flooding, floodplain delineation, and riparian ecosystem restoration in the Broad River Basin in South Carolina. A review of completed projects will review the Savannah Harbor Sediment Control Structure in Georgia to determine the appropriate disposition of the structure and the environment and navigation problems on the authorized Atlantic Intracoastal Waterway in South Carolina.

CONSTRUCTION

The Construction Program allows for the implementation of projects to correct water resource problems that burden the area.

FISCAL YEAR 2003

Important work will be accomplished in the region with funds previously appropriated. This effort includes design for deepening the Gulf Approach Channel in Panama City Harbor,

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Florida; complete construction of a large diversion structure and approach channel to the mouth of Bear Creek and restoration of the mouth of Mill Creek in the Lower Savannah River Basin in Georgia and South Carolina; complete design and award a mitigation contract in San Juan Harbor, Puerto Rico; continue the General Reevaluation Report to include coastal, economic, geotechnical and environmental studies on West Onslow/Topsail Beach, North Carolina; complete construction of levees and channels to provide flood damage protection for the Rio Grande de Manati in Puerto Rico; and providing remediation of the Clemson Diversion Dikes on Hartwell Lake and rehabilitation of the power production facilities at Hartwell Lake, Georgia and South Carolina. Congress provided funds in Fiscal Year 2003 to initiate construction of Phase II of Manatee Harbor, execute a Project Cooperation Agreement and initiate construction on the Ponce de Leon Inlet south jetty extension, reimburse the local sponsor for work in Port Everglades Harbor, initiate construction at Tampa Harbor, Alafia River, complete plans and specifications and initiate construction at Tampa Harbor, Big Bend Channel, initiate dike raising of the Tampa Harbor Disposal Area, and continue the General Reevaluation Report for improvement of Tampa Harbor in Florida; initiate construction at Gulfport Harbor, Mississippi; continue construction and initiate a General Reevaluation Report for the middle reach of Brevard County, continue the General Reevaluation Report on Segment I and reimburse the local sponsor for the Federal share of Segments II and III of Broward County, to nourish North Miami and design for nourishment of the Bal Harbor portions of Dade County, renourish 1.3 miles of Ft. Pierce Beach, reimburse a portion of the Federal share for work on the Estero and Gasparilla Island segments of Lee County, reimburse the Federal share of work by the local sponsor in Manatee County, continue efforts associated with the Amelia Island portion of Nassau County, reimburse locals for work on Delray Beach, Jupiter-Carlin and Boca Raton areas of Palm Beach County, prepare plans and specifications to nourish Long Key and Treasure Island segments of Pinellas County, complete the plans and specifications for the first nourishment of the Venice portion of Sarasota County, and monitor the St. Johns County nourishment project in Florida; initiate construction for the Dare County, Bodie Island project in North Carolina; begin work on the Myrtle Beach Storm Damage project in South Carolina; establish an account for funds to pay South Carolina to manage a portion of the Richard B. Russell Wildlife Mitigation lands in South Carolina; provide design and construction assistance for water related environmental infrastructure in Mississippi; and provide

technical assistance for the Stanley County Waste Water project in North Carolina.

5 FISCAL YEAR 2004

The President's Budget request includes \$243,467,000 for the construction program. These funds will allow for the continuing construction of important water resources projects.

NEW

There are no projects included in the President's Budget request on which to initiate construction in the South Atlantic Division. The emphasis is on completing projects that have been initiated. While this is a good strategy, it has the potential of creating a gap in construction technology and experience. Employee experience will be limited. Once the program is funded again, there may be difficulty having experienced personnel to execute the program.

CONTINUING

MOBILE HARBOR, ALABAMA

Mobile Harbor is a major port on the southwest coast of Alabama. Construction will continue this year to extend the 45 feet deep by 400 feet wide navigation channel approximately 2,100 feet to the north. Efforts will continue on the planning, engineering and design to deepen the project to 55 feet.

CANAVERAL HARBOR SAND BYPASS, FLORIDA

Canaveral Harbor is located in Brevard County on the shore of Cape Canaveral. Construction will continue on the South Jetty Extension, initiate permanent sand tightening the North Jetty and to bypass sand across the harbor entrance. Requested funds will allow completion of this sand bypass cycle.

JACKSONVILLE HARBOR, FLORIDA

Jacksonville Harbor is a major port on the northeast coast of Florida handling bulk products including petroleum and coal. Construction is continuing to provide a deeper channel and increase the capacity of the material disposal facility on Bartram Island.

MIAMI HARBOR CHANNEL, FLORIDA

The Miami Harbor Channel located on the eastern Florida coast was being constructed by the local sponsor to provide navigation improvements in support of commercial vessel traffic. The local sponsor has requested the Corps of Engineers take over construction of the project. Requested funds will be used to continue project construction.

BRUNSWICK HARBOR, GEORGIA

Brunswick Harbor is located on the Georgia coast about 80 miles south of Savannah. Construction will continue to deepen the entrance and inner harbor channels to support deeper draft ships.

PASCAGOULA HARBOR, MISSISSIPPI

Construction is continuing to deepen and widen the Pascagoula Harbor channel located on the coast of Mississippi to include deepening and widening the channel into Bayou Casotte and to construct a confined dredge material disposal facility.

WILMINGTON HARBOR, 1996 ACT, NORTH CAROLINA

Construction will continue to provide channel improvements in Wilmington Harbor located on the southern coast of North Carolina. Construction includes deepening and widening the channel for a distance of about 30 miles, providing a passing lane to allow large vessels to pass safely, deepening and widening portions of the Northeast Cape Fear River in the upper reaches of Wilmington Harbor in support of deep draft navigation, as well as raising the dikes to increase the capacity of the dredged material disposal area.

CHARLESTON HARBOR, DEEPENING AND WIDENING, SOUTH CAROLINA

Requested funds for Charleston Harbor, South Carolina will allow for continuing construction to provide a deeper channel in support of bulk and containerized cargo vessels, along with development of the Clouter Creek disposal area.

BRUNSWICK COUNTY BEACHES, NORTH CAROLINA

The shoreline protection project is located in Brunswick County, North Carolina. Construction will continue with nourishment of a sand dune and berm system to provide shoreline protection along the Ocean Isle Beach portion of the project.

CAROLINA BEACH AND VICINITY, NORTH CAROLINA

The Carolina Beach Portion and Area South of Carolina Beach provides for the construction of a dune and berm system for flood damage protection along the southeast coast of North Carolina near Wilmington. Requested funds will be used to nourish the Carolina Beach and Kure Beach segments of the project.

OATES CREEK, RICHMOND COUNTY, GEORGIA

Channel improvements and flood control measures are being funded for completion on Oates Creek to improve flood protection to Richmond County, Georgia residents and industry.

ARECIBO RIVER, PUERTO RICO

The Arecibo River basin drains about 272 square miles near San Juan, Puerto Rico. Construction will continue to provide channel improvements, floodwalls and levees to protect against flooding.

PORTUGUES AND BUCANA RIVERS, PUERTO RICO

The Portugues and Bucana Rivers project provides flood protection to Ponce, Puerto Rico through the construction of two high level dams and channel improvements. The Cerrillos Dam is substantially complete. Construction is underway on the Portugues Debris Basin shoal removals that will complete the channel work. Construction is also underway on the Portugues thin arch concrete dam. Portugues Dam was originally designed as a concrete elliptical arch dam, curved in both the vertical and horizontal planes. A review of the design is tentatively recommending a roller compacted concrete dam. A cost evaluation is underway to develop the appropriate estimated cost for construction of the dam.

RIO DE LA PLATA, PUERTO RICO

The Rio de la Plata basin drains about 240 square miles at a point 11 miles West of San Juan, Puerto Rico. Design is underway for channel improvements and levees while the project sponsor acquires the real estate for facility construction.

RIO PUERTO NUEVO, PUERTO RICO

The Rio Puerto Nuevo drainage basin is located within the San Juan Metropolitan Area along the northern coast of Puerto Rico. Construction is underway for the 11.2 miles of channel and canal improvements to provide flood protection for metropolitan San Juan.

ROANOKE RIVER, UPPER BASIN, VIRGINIA, HEADWATERS AREA

The Roanoke River Upper Basin project provides flood protection facilities for the City of Roanoke, Virginia. A flood warning system has been constructed. Construction is underway for channel improvements and training walls along with continued monitoring of the Log Perch.

RICHARD B. RUSSELL DAM AND LAKE, GEORGIA AND SOUTH CAROLINA

The Richard B. Russell Dam and Lake project on the Savannah River near Elberton, Georgia is about 97 percent complete. Testing is complete to allow operation of the turbines in the pump-back mode with minimal harm to fish populations. Testing to date has provided positive results toward successful operations. Pumped storage operation was declared commercially available on September 1, 2002 with a favorable decision from the U.S. District Court on May 3, 2002. Environmental monitoring of fishery and water quality is underway. Oxygenation systems are being placed in the project area to mitigate fish habitat losses.

CENTRAL AND SOUTHERN FLORIDA, FLORIDA

The Central and Southern Florida project includes all or part of 18 counties in central and south Florida. Construction is continuing on spillway structures, canals, levees, and water control structures to provide flood protection, floodplain preservation, and water quality enhancement in the Upper St. Johns River basin. Construction is also continuing on the locks, channels, and canals for Manatee Pass-Through Gates. Construction is underway for the West Palm Beach Canal to provide flood protection for the agricultural areas, along with other work specifically directed by the Congress. Funds are included for engineering and design activities associated with the Comprehensive Everglades Restoration Plan.

EVERGLADES AND SOUTH FLORIDA ECOSYSTEM RESTORATION, FLORIDA

Identification and prioritization of projects to restore the Everglades and South Florida ecosystem has been completed. Evaluation reports have been approved for 12 projects. Design effort will be completed and construction will be initiated on the most critical projects. Execution of nine of the highest priority projects will exhaust the \$75 million authorized to be appropriated for this effort. The remainder of the proposed projects will be included as part of the Comprehensive Everglades Restoration Plan for execution. Projects currently underway include the Florida Keys Carrying Capacity, East Coast Canal Structures, Tamiami Trail Culverts, and Southern Crew.

KISSIMMEE RIVER, FLORIDA

Channel and canal construction and floodway control structure modifications are underway for the Kissimmee River environmental restoration project, located in central Florida. The project provides for filling a portion of the canal to restore the natural meandering river flows to improve environmental conditions.

WALTER F. GEORGE, POWERHOUSE AND DAM, ALABAMA

The navigation lock and gated spillway of the Walter F. George project is located on the Chattachoochee River near Montgomery, Alabama. Construction will continue to provide a concrete cutoff wall upstream of the structure to prevent water from seeping under the facility and erosion and piping of the limestone foundation.

WALTER F. GEORGE, POWERPLANT, ALABAMA

Construction is continuing to rehabilitate the Walter F. George power plant project located on the Chattahoochee River between Alabama and Georgia. The plan of improvement is to refurbish the four turbines, replace the exciters and rewind the generators.

HERBERT HOOVER DIKE, FLORIDA

The Herbert Hoover Dike system is a 142-mile earth-filled levee that encircles Lake Okechobee that is located almost in the center of the state of Florida. Portions of the dike are subject to seepage, piping and erosion problems. Dike failure along with flooding would result in extreme socio-economic and environmental damages including a potential for human suffering. Construction underway includes filter blankets, relief trenches, and drainage systems to rehabilitate the dike. Construction funding to date has been under the Dam Safety program.

JIM WOODRUFF POWERHOUSE, FLORIDA

Construction is underway to rehabilitate the Jim Woodruff power plant located on the Apalachicola River near Tallahassee, Florida. Work involves replacing the three turbines, rewinding the three generators, and replacing the transformers to reduce maintenance costs and improve power production efficiency.

BUFORD POWERHOUSE, GEORGIA

Continuing construction for the Buford Powerhouse project in Georgia just northeast of Atlanta will allow for the rehabilitation of the power plant. Work involves replacing the three turbines, the exciters, and rewinding the three generators.

J. STROM THURMOND LAKE POWERHOUSE, GEORGIA AND SOUTH CAROLINA

Rewinding seven generators and replacing the turbine rotating parts are underway at the J. Strom Thurmond Lake Powerhouse located on the Savannah River near Augusta, Georgia. The effort will improve the overall project reliability, reduce operation and maintenance costs, and provide additional hydropower capacity and power revenues.

JOHN H. KERR DAM AND RESERVOIR, VIRGINIA AND NORTH CAROLINA

The John H. Kerr Dam and Reservoir power facilities, located in north central North Carolina and south central Virginia are in need of rehabilitation. Construction will continue to rewind the generator units, refurbish the turbines, and replace key electrical and mechanical equipment in order to improve overall reliability of the project, reduce operation and maintenance

costs, and provide additional hydropower capacity and power revenues.

11 OPERATION AND MAINTENANCE

The Operation and Maintenance Program provides for the operation, repair, service and up-keep of the infrastructure and activities to insure that completed projects fulfill their authorized purposes.

FISCAL YEAR 2003

In Fiscal Year 2003, available funds are being used to provide essential work on 42 harbor and channel projects; six waterways containing locks and dams, four flood control projects, two flood protection projects, and 13 multiple purpose projects that include hydropower production while also conducting project condition surveys and the removal of aquatic growth, along with the operation and maintenance of appropriate recreation facilities. The available amount includes additional funds added by the Congress for additional work on specific projects. include: additional dredging in Alabama Coosa Rivers, Black Warrior and Tombigbee Rivers, Dauphin Island Bay, Dog and Fowl Rivers, Escambia-Conecuh Rivers, Mobile Harbor, Perdido Pass, Tennessee-Tombigbee Waterway and Wolf and Jordan Rivers in Alabama; Apalachicola Bay, Intracoastal Waterway Jacksonville to Miami, Miami River, Palm Beach Harbor, and Pensacola Harbor in Florida; Biloxi Harbor, Gulfport Harbor and Pascagoula Harbor in Mississippi; Atlantic Intracoastal Waterway, Lockwoods Folly River, and New Topsail Inlet in North Carolina; and Atlantic Intracoastal Waterway, Cooper River, Charleston Harbor, Folly River, Georgetown Harbor, Port Royal Harbor, and Town Creek in South Carolina. Additional funds were provided to accomplish environmental dredging on the Apalachicola, Chattahoochee, and Flint Rivers system, and additional funds for the Tennessee-Tombiquee Wildlife Mitigation project. Additional funds were provided for work at multiple purpose power projects at Miller's Ferry Lock and Dam and Robert F. Henry Lock and Dam in Alabama.

PROJECT SECURITY

Civil Works projects have been analyzed to determine their vulnerability to damage by small groups or individuals in a terrorist attack. Security measures are being accomplished. Such activities include installing security cameras, building fences, and restricting access to the areas. Each project has

been evaluated to determine the appropriate measures for that facility.

12 CRITICAL BACKLOG

As stewards of a diverse and widespread complex of water resources projects, the Corps of Engineers is challenged to ensure the continued flow of benefits, which are so critical to our nation's security and economic well-being. With such a vast inventory of water resources projects throughout the region, the need for routine maintenance, major repairs, replacement of outdated or worn facilities, management improvement studies and correction of environmental is forever present. We continue a concerted effort to identify the highest priority work on which to concentrate available resources. While attempts are made to address the most critical of these requirements throughout the year when, and if, funds become available from savings and slippages, a much larger infusion of funds will be required to preserve the integrity of the region's water resources infrastructure and thus insure our future security and economic well-being.

FISCAL YEAR 2004

OPERATION AND MAINTENANCE

The largest category of our Fiscal Year 2004 Budget request is for operation and maintenance. We are requesting \$316,926,000 to insure that completed projects fulfill their authorized purposes.

NAVIGATION PROJECTS

Our request includes \$184,933,000 for navigation, which allows us to maintain 29 major harbors and other small harbor and channel projects. Along with our harbors, our 3,800 miles of inland waterways with 33 locks and dams are vital to waterborne commerce, both domestic and international.

FLOOD CONTROL PROJECTS

Flood control projects account for \$22,519,000 of our request. These projects have prevented flood damages valued in excess of \$1 billion over the past 50 years.

13 MULTIPLE PURPOSE PROJECTS

The 13 Multiple purpose projects which we operate and maintain account for \$104,595,000 of our operation and maintenance request. The Budget proposes that \$40,463,000 in hydropower activities be funded directly from Power Marketing Administration receipts. These projects provide a variety of benefits, including hydropower production. They generated 2.5 million megawatt hours of power last year resulting in sales revenues of \$98 million.

PROTECTION OF NAVIGATION

Protecting navigation on our waterways is vital to the economic wellbeing of the nation. We are requesting \$4,879,000 for this purpose, which includes project condition surveys and the removal of aquatic growth.

CONCLUSION

The South Atlantic Division continues, with your support, to have an important and active Civil Works program for the public in the southeastern United States. These projects support the military services in time of conflict and war. Located as we are in the City of Atlanta, we believe that we are well positioned, with demonstrated ability, to continue the tradition of engineering excellence in the service of the citizens of this great region. Mr. Chairman that concludes the status report for this year.